1. A network management system comprising:

a graphical user interface configured to display a graphical representation of a model network and a graphical representation of operations of the model network wherein the network model comprises a plurality of model elements including a model media gateway controller coupled to a model media gateway;

a computer system coupled to the graphical user interface and configured to receive a message from the graphical user interface, process the message to generate call signaling for a call through the model network, transfer the call signaling to a live media gateway controller that corresponds to the model media gateway controller and is coupled to a live media gateway that corresponds to the model media gateway, receive a control message indicating an identifier for the call from the live media gateway controller, process the control message to generate a response, and transfer the response to the graphical user interface wherein the response indicates one of the operations of the model network.

- 15 2. The network management system of claim 1 wherein the graphical user interface is configured to receive the response and display the one operation of the model network.
 - 3. The network management system of claim 2 wherein the one operation comprises the model media gateway controller transferring a graphical representation of the control message to the model media gateway.
 - 4. The network management system of claim 1 wherein the live media gateway interworks call traffic from a non-packet based network to a packet based network.
- 5. The network management system of claim 4 wherein the identifier for the call comprises an address in the packet based network.
 - 6. The network management system of claim 1 wherein the model media gateway is coupled to a model non-packet based network and a model packet based network.

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- 7. The network management system of claim 1 wherein the call signaling comprises signaling system 7 (SS7) signaling.
- 8. The network management system of claim 1 wherein the call in the model network comprises a test call.
 - 9. A method of operating a network management system wherein the network management system comprises a graphical user interface configured to display a graphical representation of a model network and a graphical representation of operations of the model network wherein the model network comprises a plurality of model elements including a model media gateway controller coupled to a model media gateway, and a computer system coupled to the graphical user interface, the method comprising:

in the computer system, receiving a message from the graphical user interface generating call signaling for a call through the model network;

transferring the call signaling for the call to a live media gateway controller that corresponds to the model media gateway controller and is coupled to a live media gateway that corresponds to the model media gateway;

receiving a control message indicating an identifier for the call from the live media gateway controller;

- processing the control message to generate a response to the graphical user interface wherein the response indicates one of the operations of the model network; and transferring the response to the graphical user interface.
- 10. The method of claim 9 further comprising, in the graphical user interface, receiving25 the response and displaying the one operation of the model network.
 - 11. The method of claim 10 wherein the one operation comprises the model media gateway controller transferring a graphical representation of the control message to the model media gateway.

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- 12. The method of claim 9 wherein the live media gateway interworks call traffic from a non-packet based network to a packet based network.
- 13. The method of claim 12 wherein the identifier for the call comprises an address in5 the packet based network.
 - 14. The method of claim 9 wherein the model media gateway is coupled to a model non-packet based network element and a model packet based network element.
- 10 15. The method of claim 9 wherein the call signaling comprises signaling system 7 (SS7) signaling.
 - 16. The method of claim 9 wherein the call in the model network comprises a test call.
- 15 17. A software product for a network management system comprising: software operational when executed by a processing system to direct the processing system to display in a graphical user interface a graphical representation of a model network and a graphical representation of operations of the model network wherein the model network comprises a plurality of model elements including a model media gateway 20 controller coupled to a model media gateway, receive a message from the graphical user interface, process the message to generate call signaling for a call through the model network and transfer the call signaling to a live media gateway controller that corresponds to the model media gateway controller and is coupled to a live media gateway that corresponds to the model media gateway, receive a control message indicating an identifier for the call from the live media gateway controller, process the control message to generate a response, 25 and transfer the response to the graphical user interface wherein the response indicates a one of the operations of the model network; and

a storage system to store the software.